

REMARKS

All the aspects of the different embodiments of the present invention have a common characterizing feature that a video stream containing video is recorded together with a plurality of pieces of copy control information and the respective pieces of copy control information indicate different restrictions to be imposed on recording of a video signal converted from frame images of the video, depending on the quality levels of the video signal output.

The following describes the technical significance of the copy control information.

Generally, copying of movies distributed in DVD-Video format is totally prohibited. Unfortunately, such strict copy control has lead to an opposite effect of driving some users to illegally make personal copies using a tool called a ripper. As a consequence, the demand for rippers increases and many rippers are on the underground market. In other words, the prohibition of personal copies for copyright protection has ironically led to expansion of the market for the illegal copying tools.

The music industry similarly suffers from the widespread of illegal copies and thus has started to appreciate the concept of “pre-rip.” According to the concept, CDs supplied to users, store in advance a pre-ripped or copiable version of the original content. Since an MP3 copy is readily available, users are not motivated to obtain a ripper tool and make personal copies. The pre-ripping measurement has been successful to some extent as it reduces the motivation to make illegal copies.

Unfortunately, however, this measurement requires a free space to be secured on CDs for storing a pre-ripped version. Unlike music data that is relatively small, movie content of high-

quality image is large in data size. Even in a 50G-byte BD-ROM, it is practically impossible to secure enough space for storing a pre-ripped version.

Since a certain size of free space on a recording medium is required, the conventional ripper measurement is not suitable for a recording medium storing movie content of high-quality images, which occupies most of the recording medium capacity.

In view of the above, the present invention provides a plurality of pieces of copy control information that indicate different restrictions on recording of a video signal converted from frame images of a video, depending on quality levels at which the video signal is to be output. With such copy control information, a setting can be realized where a recording of a high quality video signal is prohibited, while recording of a standard quality video signal is still permitted.

As long as the video signal is output at a standard image quality, users are permitted to readily obtain a copy of the standard image quality, simply by connecting an output terminal of the playback device to an input terminal of a recording device.

Since a copy of a certain level of image quality is available simply by connecting a recording device to a playback device, users are not motivated to go through the trouble of obtaining a ripper to make illegal copies. As a result, there is an advantageous effect that users are no longer interested in making illegal copies.

The Office Action raised some minor objections under 35 U.S.C. §112 which has now been corrected.

The Office Action further rejected Claims 1-6 as constituting non-statutory subject matter. These claims have also been amended to address this issue, while Claim 13 has been cancelled.

The Office Action also rejected Claims 1-6 over *Kori et al.* (U.S. Publication 2004/0028385).

The Office Action cited, with regards to Claim 1, the use of a plurality of pieces of copy control information citing, for example, the use of an electronic watermark which involves adding additional information into either the video data or music data that would not be perceivable upon playing but would be difficult to remove to enable a clean copy without the watermark. Citing Paragraphs 0013 and 0014.

As will be described hereinafter, the present invention is distinguishable not only from an electronic watermark processing but also from the steam adapted in the *Kori et al.* use of a detected copy and count data as a key component of its detection feature.

According to the invention recited in *Kori et al.*, it is judged that whether or not a target recording medium is such that high-rate copying of an information signal onto the recording medium is possible. If high-rate copying onto the target recording medium is judged not possible, the SCMS (Serial Copy Management System) is employed to impose generational copy control. On the other hand, if high-rate copying onto the target recording medium is judged not possible, then stricter copy control is imposed using another copy control method.

If the Office Action rejections are correct, it then *Kori et al.* discloses that a higher-rate copying results in higher quality, whereas a lower-rate copying results in lower quality. With reference to *Kori et al.*, Paragraphs 0026 and 0192 disclose that if high-rate copying is possible, the target information can be copied in a shorter time and thus copy control according to the UCS method is performed to impose stricter restrictions. That is, *Kori et al.* discloses such copy control relative to copy rate. If copying can be done in a shorter time, stricter copy control is imposed and if copying takes a longer time, less strict copy control is imposed. In short, *Kori et*

al. fails to realize such copy control that copying at higher image quality is restricted more severely, whereas copying at standard image quality is restricted less severely.

Kori et al. would not be construed by a person of ordinary skill in this field to have disclosed such copy control that copying at higher image quality is restricted more severely, whereas copying at standard image quality is restricted less severely. Therefore, such a hypothetical interpretation contradicts the specific disclosure of *Kori et al.* and *Kori et al.* does not disclose that a plurality of pieces of copy control information indicate different restrictions to be imposed on recording of a video signal depending on the quality levels of the video signal output.

Furthermore, *Kori et al.* discloses that the levels of restrictions to be imposed are determined depending on whether the target recording medium is configured to allow high-rate copying, rather than on the quality of image signals as addressed by the present invention. Thus, *Kori et al.* cannot be relied upon to reject the novelty of the present invention.

“[A]nticipation by inherent disclosure is appropriate only when the reference discloses prior art that must *necessarily* include the unstated limitation. . . .”

Transclean Corp. v. Bridgewood Services, Inc., 290 F.3d 1364, 62 USPQ2d 1865 (Fed. Cir. 2002)

Claims 7-14 were rejected over a combination of the *Aridome* (U.S. Patent Publication 2004/0126097) in view of the *Kori et al.* disclosure. The Office Action specifically acknowledged that the *Aridome* reference failed to disclose a plurality of pieces of copy control information recorded on the recording medium with the pieces of copy control information corresponding to a quality level of the video signal. Needless to say, the Office Action relied upon the *Kori et al.* disclosure for that feature.

It is believed that the above comments on *Kori et al.* more than adequately disclose that this is an improper interpretation and that such a combination does not meet the standards required under the *KSR* International Guidelines of the USPTO.

It is the Examiner's burden to establish *prima facie* obviousness. See *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993) Obviousness requires a suggestion of all the elements in a claim (*CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003)) and "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007). Here, we find that the Examiner has not identified all the elements of claim 1, nor provided a reason that would have prompted the skilled worker to have arranged them in the manner necessary to reach the claimed invention.

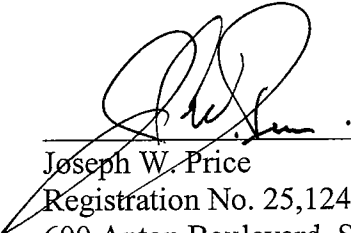
Ex parte Karoleen B. Alexander, No. 2007-2698, slip op. at 6 (B.P.A.I. Nov. 30, 2007)

Aridome discloses an internal structure of a playback apparatus having a buffer 228 and a video decoder 225 to provide a video signal with a processing section 231 to process video signals. *Aridome* fails to disclose a plurality of pieces of copy control information indicating different restrictions to be imposed on recording of a video signal depending on the quality levels of the video signal output. Thus, *Kori et al.* even in view of *Aridome* still fails to render the present claims obvious to arrive at any aspects of the invention recited in Claims 7-14. It is, therefore, respectfully submitted that the present invention is novel and non-obvious over *Kori et al.* and *Aridome*, regardless of whether they are taken alone or in combination.

If there are any questions with regards to this matter the undersigned attorney can be contacted at the below listed telephone number.

Very truly yours,

SNELL & WILMER L.L.P.



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